MULTIMEDIA UNIVERSITY ®

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2016/2017

PIM0245 – INTRODUCTION TO MULTIMEDIA TECHNOLOGY

(Foundation in Information Technology)

10 MARCH 2017
3.00 p.m. – 5.00 p.m.
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of **THREE** pages (excluding the cover page).
2. Answer **ALL** questions.
3. Write your answers in the Answer Booklet provided

Instructions: Answer all questions. Write your answers in the Answer Booklet.

QUESTION 1 [10 Marks]

a. Define the difference between linear and non-linear multimedia presentation.

(2 marks)

b. Multimedia product can be recognized into several groups. Identify the difference between briefing product and database product. State **TWO (2)** examples for each of the product to support your answer.

(4 marks)

c. What is multimedia system? List and explain briefly **TWO (2)** components of multimedia system.

(4 marks)

QUESTION 2 [10 Marks]

a. Multimedia interface is an essential element of a multimedia system. These are several components of interface. Explain briefly each of the component below:

(4 marks)

i. Button
ii. Icon
iii. Feedback
iv. Rollover

b. Text is used in the form of words, sentences, and paragraphs to convey information, ideas and facts. Identify **TWO (2)** characteristics that are also used to describe text physically other than typeface, size and style. Explain briefly each of the characteristics.

(3 marks)

c. The quality of graphic element contributes a huge role in development of multimedia interface and makes the system more interesting. List and explain briefly **TWO (2)** types of resolution to measure the quality of graphic images.

(3 marks)

Continued...

QUESTION 3 [10 Marks]

a. Animation is one of the element that commonly used in a multimedia product. What is animation? How does it differ from video?

(2 marks)

b. Write the **CORRECT** method of computer animation for each of the explanation given below.

(2 marks)

Explanation	Method
1. The process of linking objects, and defining their relationship and limits	
2. An effect in which a still or moving image is transformed into another	
3. Parts can be drag around and the computer will calculate the result once the relationships and parameters have been set	
4. The study of the movement and motion of structures that have joints	

c. Most of the e-learning modules are developed using multimedia authoring tools and software. What is the function of authoring tools and authoring software incorporated in multimedia authoring tools?

(2 marks)

d. Authoring tools are constantly being improved by integrating several features to support the development of the multimedia application. One of the common features is interactivity. What is interactivity features? List **TWO (2)** levels of interactivity offered in this feature.

(4 marks)

QUESTION 4 [10 Marks]

DesignIT Company has been assigned to develop a tourism information kiosk which will be stationed at the public area. This application must include menus such as interesting places, food and culture offered in certain location. User should be able to choose and proceed with any menu offered by the application as they need.

a. Suggest **THREE (3)** advantages of having this kiosk to the community.

(3 marks)

b. Determine the target audience is one of the steps required in the development of the kiosk. Propose **TWO (2)** factors that need to be considered for this step.

(2 marks)

Continued...

c. Suggest the **MOST** suitable navigation structure for the above scenario. Support your answer with a reason.

(1.5 marks)

d. Draw the navigation structure to support your answer in 4(c).

(3.5 marks)

QUESTION 5 [10 marks]

Lela needs to develop a montage using multimedia authoring software. This montage will consists of several graphic images and a video where all the elements and events are organized in a sequence from the beginning to the end. Lela has decided to produce a 45 second video clip with 30 fps. This is a high quality video as it uses 24-bit of colour resolution and the frame size is 240 by 180. She will incorporate an audio file into the video clip.

a. Suggest the **BEST** category of multimedia authoring tools for Lela to use in the montage development with **TWO (2)** examples.

(2 marks)

b. Assist Lela to calculate the file size of the audio that she wants to include in her video clip as below. Show the calculation process in details and write the answer in MB.

Time	No. of channels	Sampling Rate	Sound resolution
45 second	Stereo	44,100 Hz	16 bit

(3.5 marks)

c. Calculate the file size of the video and write the answer in MB. Show the calculation process in details.

(4.5 marks)

End of Paper